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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/425,027	10/25/1999	TAKASHI SHIMIZU	104610	8990

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EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

12

DATE MAILED: 06/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/425,027

Applicant(s)

SHIMIZU ET AL.

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Prosecution Application

1. The request filed on 5/13/02 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/425,027 is acceptable and a CPA has been established. An action on the CPA follows.

Drawings

2. Figures 4A and 4B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "the air is involved" page 3, line 11; "so that it is not able to use" page 3, lines 11-12; "by involving the air" page 3, line 17; "without involving the air between them" page 5, line 6, etc.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 12 and 15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is noted applicant has amended the application to include new claims 12-17. The addition of the limitations “substantially free of trapped air” in claim 12 and “bonding the whole surface” in claim 15 appears to be “new matter”. Applicant’s support for claim 12, specification page 5, lines 2-6, does not describe a surface substantially free of trapped air, rather the support is directed to the web-like adhesive allowing air to be discharged through the top cover member when bonding the top and bottom cover members. It is suggested applicant incorporate the language contained in the specification on page 5, lines 2-6, into claim 12. Further, applicant’s support for claim 15, specification page 5, lines 2-6, does not describe the bonding of the adhesive surfaces. However, it is noted that Figure 2C shows the adhesive surface of the top member in the press for bonding to the bottom member where both surface are of similar size. It is suggested to change “bonding the whole surface” to - - bonding the surface -

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6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 4-6 and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. In claims 4 and 14, the word "lining" in line 1 is unclear and confusing. Does it mean a head liner? It is suggested to change "lining" to - - head liner - -. This issue should be clarified and reworded as appropriate.

9. In claims 4 and 14-16, the phrase "web-like hot melt adhesive" is unclear and confusing. It is uncertain what is meant by "web-like". Does it mean the adhesive is in a pattern? It is suggested to change "web-like hot melt adhesive" to - - hot melt adhesive in a pattern - -. This issue should be clarified and reworded as appropriate.

10. Claim 6 recites the limitation "the melting step" in line 2. There is insufficient antecedent basis for this limitation in the claim. It appears the melting step is the process of melting the web-like hot melt adhesive. It is suggested to change "the melting step" to - - melting the hot melt adhesive in a pattern - -.

11. The term "substantially" in claim 12 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is suggested to change "substantially free of trapped air" to - - free of trapped air - -.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 4-6 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Kozlowski (U.S. Patent 5,647,943) further taken with any of Winslow (U.S. Patent 5,399,220), Yoshida et al. (U.S. Patent 5,187,123), Spielau et al. (U.S. Patent 3,850,725), Simon (U.S. Patent 5,346,569), or Sato et al. (U.S. Patent 4,452,840).

The admitted prior art teaches that it was known to manufacture a formed lining for a vehicle comprising a top cover member (preformed film of hot melt adhesive laminated to a backside) bonded to a base member (preformed film of hot melt adhesive laminated to a front side) (Paper #8 page 6, lines 1-5). The base member is heated, softening the base and melting the adhesive applied thereon, and used to melt the adhesive of the top member (Specification page 2). The top member and base member are then bonded and formed at the same time along the entire length of each adhesive (Figures 4A and 4B and Specification page 1). The hot melt adhesive of the base member has a thickness of 15 to 75 μm for normal strength and 75 to 100 μm for high strength (Specification page 2).

Regarding claims 4, 5, and 13, the admitted prior art is silent on heating the base member prior to placement in a die and using a cold press to form the lining. However, it was a well-known technique in the art to heat the base member in an oven prior to forming the liner in a cold press as shown by Kozlowski. Kozlowski is directed to bonding a seat trim cover to a foam

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cushion. Kozlowski teaches that heating the mold directly (a hot press) to bond and form the laminate may damage the trim (Column 1, lines 29-31). Therefore, Kozlowski shows heating the cushion (base member) in an oven and then inserting the cover and cushion into a cold press to form and bond the laminate (Column 2, lines 52-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the liner taught by the admitted prior art by heating the base member prior to placement in the mold and then using a cold press to bond and form the liner as taught by Kozlowski so that the fabric layers of the liner are not damaged.

Regarding claims 4 and 14-16, the admitted prior art is silent on using a web-like hot melt adhesive as the adhesive layer on the backside of the top cover member. However, the use of a patterned (web-like) adhesive layer is a well-known technique in the bonding art to form a laminate free of air bubbles as shown below by Winslow, Yoshida et al., Spielau et al., Simon, and Sato et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a patterned hot melt adhesive as taught by Winslow, Yoshida et al, Spielau et al., Simon, or Sato et al on the backside of the top cover member in the process of the admitted prior art as modified by Kozlowski to provide a means for entrapped air to escape the laminate when the top member and base member are bonded.

Winslow is directed to bonding two disc halves together with adhesive to form a composite disc that is free of air bubbles and contaminates. Winslow teaches that applying the bonding adhesive in a pattern allows trapped air to escape during bonding, and thus, eliminates defects caused by trapped air bubbles and other contaminants (Column 1, lines 41-47 and Column 2, lines 59-62 and Column 3, lines 26-28). Yoshida et al. are directed to adhering

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semiconductor chips to a lead frame. Yoshida et al. teach applying the bonding adhesive in a pattern to ensure that when the die is pressed to form the laminate existing air is forced out and not trapped within the laminate (Abstract and Column 2, lines 66-69 and Column 3, lines 1-12). Spielau et al. are directed to forming plastic sheet laminates using a thermoplastic adhesive. Spielau et al. teach applying the thermoplastic adhesive to the plastic sheets in a pattern so that when permeable materials are bonded they remain breathable (Column 3, lines 17-22). Simon is directed to manufacturing a glass laminate that is free of discontinuities found when air is trapped within the laminate. Simon teaches bonding two sheets of glass together with a plastic sheet that contains a pattern of projections. The projections allow air trapped within the laminate to be removed when laminating the glass-plastic-glass sandwich (Figures 1-3 and Column 1, lines 12-15 and 62-68 and Column 2, lines 1-10). Similarly, Sato et al. are directed to forming a glass-plastic-glass laminate wherein the plastic sheet used to bond the two glass sheets has a pattern on its surface. The pattern allows for deairing of the laminate (Figure 1 and Column 2, lines 1-17 and 30-33 and 40-42).

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the


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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



John L. Goff
June 21, 2002



JERROLD H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300